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## SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Blattner, Frederick R.

Burland, Valerie Rose, Debra J. Mayhew, George F. Perna, Nicole Perry, Robert D. Straley, Susan C.

Fetherston, Jacqueline D.

Lindler, Luther E. Plano, Gregory V.

(ii) TITLE OF INVENTION: Plasmid DNA from Yersinia Pestis

(iii) NUMBER OF SEQUENCES: 3

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Quarles & Brady

(B) STREET: 1 South Pinckney Street

(C) CITY: Madison

(D) STATE: WI

(E) COUNTRY: US

(F) ZIP: 53701-2113

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: Word Perfect 8.0

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 09/409,800

(B) FILING DATE: 09/30/99

(C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Seay, Nicholas J.

(B) REGISTRATION NUMBER: 27386

(C) REFERENCE/DOCKET NUMBER: 960296.95939

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (608) 251-5000

(B) TELEFAX: (608) 251-9166

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## (2) INFORMATION FOR SEQ ID NO: 1

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- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 100990
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: circular
- (ii) MOLECULE TYPE: DNA (plasmid)
- (xi) SEQUENCE DESCRIPTION:

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ggtttctgac cagttgaccg gaattgggtg tgtaatccat tttcacatta agaccatttt 4380 ttctgaaaaa gcctttttcc tgggcaaccc aaacaggcag gttccacccc ccctgaaaag 4440 taatgacgtt aatatccctg atagatgagc ttgattcccg ggtatccgcc gcgtgtaggg 4500 cgccgggcag gataaatgca agtgaaacgg ttaaagccaa gcatctgaac ataatattta 4560 cctcttactg tgaacagttc gtaagagttt aaaaaaatgg gtaatgataa taaagtagaa 4620 agcattctgg ctatctggcg aataactggc tcatttttac cagcaaatgg ataagcataa 4680 gegeeggtaa ggeageeteg aatgegeaga teteggteea ttgeeagtga egaaageeea 4740 cgttacattt agaaatcatt accgccatga aaataggtat tcacttactt atgtattttg 4860 tcataatcat gtgcctgtag attttcttct gtgccgtgtt gtctgggttg ttcgcctctc 4920 aagcacgctt aatatctgta tcaaaataac cacaaaggaa aagacacatg acattgccat 4980 acggggtgat atcagatccc cattatcatc gttgggatgc ttttgcgaca acaaacgctg 5040 acgggctgaa ctctcgactg gagatccaac tggatgccac gaaagaagct gccaaagcca 5100 tgaaagetge gggetgeaag cacatgetgg tggetggtga taettteeat gttegtggtg 5160 ctatatcgcc ttccgtcctg catttcgtga ccgaaactta cgagtggatc atcaaagagt 5220 tgggcctcga agtggttatg ctggccggca accacgacct cgaaaccaac gattccgtat 5280 acagegecaa tgeageggee tetetgeget caateggtgt ggaaategte tgeggeaaac 5340 gtcctcactc catcaaaatt ggcgacgtta ccgtccatct gattagctgg cgcaataacc 5400 acgcagaget tatcagegae etcaaaacae tgcgtteegg getggatgge gacaatcaeg 5460 atgtcgttgt gcatacctcg atcaacaaag cgatccctac catgcctgat gtcggcatcg 5520 acgcacagga actgaaagat atcggcttcc gtttgttgtt gtccggacac taccacaacc 5580 acaaagaagt gctgcctggg gtggttagca tcggggcgct gacgcaccag aattggggtg 5640 atgttggctc gctggctggc ttcatgatcg tcaaccctga cggcacattc acccaccacg 5700 aaacctctgc acccaagttc gtgaaccttg aggacgatgt ggaagacgat caaattcgcg 5760 gtaactacgt gcgctttcgt gccgttgttg agaacgatga agaaggcatc aaactccaga 5820 acgtcctgaa aacaatgggc gcgaagggtg tcgtctgcaa cttcatccgc aaggcatcga 5880

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tcaccgaccc gccatatete gteggtttte gtgacegtea ggggegtace ategeeggeg 66780 ataaaaccga tgaatggctg caacccgcct gccatgagat gtatcgcgtg ctgaaaaaaa 66840 acgegetgat ggtgagette taeggetgga acegegtega tegetttatg geegeetgga 66900 aaaatgcggg attcagcgtt gtcggccacc tggtgtttac caaaacctac acatcgaagg 66960 ccgcatatgt gggctatcgc cacgaatgcg cctacatcct tgcaaaaggc cgtccgcccc 67020 tgccgcaaaa cccgttgaat gacgtaattg cgtggaaata ttcaggcaac cggcaccacc 67080 cgaccgaaaa acccgtaacc agcctgcaac cgctgattga gtccttcaca catcccggcg 67140 cgattgtgct cgaccccttt gccggcagtg gctccacctg cgtggccgcc ctccaggctg 67200 gccgtcgtta catcggtatt gaattgcttg agcagtatca ccgggccgga cagcagcgtc 67260 tggccgccgt ccggcgcgc atgcagtacc cggccgctaa cgacgagttc ccggaggccg 67320 cgtaatgaac tatgcaggac acgaaaaact ccgcgcagaa gtggcggaag tagccaacag 67380 catgtgtgac ctgcgggcga cgctgaacgg gatggagcac cgctatcgct ttgactctga 67440 tgtgctggtc gaacgcctga cccgtcagac cctttttcgc atcaatgccc tgtttatggc 67500 ggcatacaac gaaatgcttg agctggatgc ctgctttaag gactaaggag aaaaacatgt 67560 acggaacctg tgaaaccctc tgccgcttgt tgcgtgagca gtatcccgca gaaaccccgc 67620 tgaacctcat tgtctggtcc ccggcggata tcgaagcact ggccgacgga atggaatatg 67680 ccgtttcgga acaggacaca agggcggtac tggcgcgtat ggacgccata ccggaagaac 67740 aacagcttga gtcgggcgtg tctgccggtg cagtgatgga tctgattgaa caggtgaaag 67800 aggcagttcc ggcggtgatg gtgccggcgg atctgcttga aaccctgcta accactgccg 67860 aacaggcgtt atggcacagg gaatggaccg cccgtgacag caatcatccg gtcccggaaa 67920 gcgttacccg ccgcctggct gatgcggcga aagttcgcgc attactgaaa aaatgaaatc 67980 aacacgccgc ccgggcggcg tgtactgacc ccgttcagag gaacccatta tgcaggaaac 68040 caccacgtta aacgcccttg tgatgcgccg tgcgcgcgat ttgattgctg attatggatg 68100 gcctgaccat accgatgttg atcagcgtga tccggtcaat aaaccgggat ggataagcat 68160 ttatgtccgt ctggatgcgg caaatattgt tcatctgctt cctttacttt gtagcggtga 68220 catacccgca gagctgcaaa atgccatgac aaaaatagcc gggacgtcag cgcagattat 68280

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## (2) INFORMATION FOR SEQ ID NO: 2

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- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 70559
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: circular
- (ii) MOLECULE TYPE: DNA (plasmid)
- (xi) SEQUENCE DESCRIPTION:

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OBMAD\ 200068.2 -81-

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## (2) INFORMATION FOR SEQ ID NO: 3

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9960
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: circular
- (ii) MOLECULE TYPE: DNA (plasmid)
- 20 (xi) SEQUENCE DESCRIPTION:

tggcgtgatg atggaactgc aacatcaacg actgatggcg ctcgcggc agttgcaact 60 ggaaagcctt ataagcgcag cgcctgcgct gtcacaacag gcagtagacc aggaatggag 120 ttatatggac ttcctggagc atctgcttca tgaagaaaaa ctggcacgtc atcaacgtaa 180 acaggcgatg tatacccgaa tggcagcctt cccggcggtg aaaacgttcg aagagtatga 240 cttcacattc gccaccggag caccgcagaa gcaactccag tcgttacgct cactcagctt 300 catagaacgt aatgaaaata tcgtattact ggggccatca ggtgtggga aaacccatct 360 ggcaatagcg atgggctatg aagcagtccg tgcaggtatc aaagttcgct tcacaacagc 420 agcagatctg ttacttcagt tatctacggc acaacgtcag ggccgttata aaacgacgct 480

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At a

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